Appendix IV

Draft Core Essential Elements of a State or Tribal Wetlands Program

EPA's Wetland Program Development Grants have assisted states and Tribes in developing or refining their wetland programs since 1990. Under the Wetland Program Development Grants, funds can only support development or enhancement of wetland programs; funds cannot support operation or implementation of wetland programs. EPA's Wetlands Division recognizes that not being able to fund the operation of state and Tribal programs has been problematic to states and Tribes.

To address this problem, EPA's Wetlands Division is likely to implement an initiative in FY 2001 that will provide a limited exception to the normal competitive process for wetland grants. In FY 2001, states and Tribes may be eligible for some operational support of their wetlands program through their Performance Partnership Grants (PPG). To be eligible for this funding, states and Tribes must have in place several core essential elements for a comprehensive, effective wetland program.

This FY01 initiative is intended to provide those states and Tribes that have worked hard to develop and establish comprehensive, effective, environmentally sound programs that protect, manage, and restore their wetland resources with funding to partially implement those programs. The standard is set high, but it is attainable for states and Tribes with comprehensive wetland programs.

If a state or Tribe feels that they meet the identified core essential elements, they should provide documentation to the appropriate EPA Regional Office (Wetland Coordinator). If they demonstrate that their wetland program meets all the final core elements, and EPA (Region and Headquarters) agrees, the state or Tribe is eligible to receive a determined level of base funding to support the operation of its wetlands program.

A state or Tribe's wetland program must meet **ALL** of the following core essential elements to qualify for operational support funding through a Performance Partnership Grant (PPG).

State or Tribal "Vision"

The state or Tribe shall have completed an analysis or evaluation of the current status of its wetland and wetland-related program(s). As part of this process, the state or Tribe should develop a strategy for contributing to the national goal of no net loss/net gain of wetlands. This evaluation could be accomplished in a number of ways such as completion of a State/Tribal Wetland Conservation Plan, the development of a Wetland Strategic Plan or other similar effort or initiative.

Coordination

In many states, wetland programs and/or wetland-related programs are administered within several state agencies including the traditional water quality agencies, natural resource agencies, fish and wildlife agencies, agriculture agencies,

state planning offices, parks and recreation agencies, departments of transportation, natural heritage programs, and others. Adding all these programs together, the state's program may contain all the identified core elements to qualify for operational support funding under this funding option. However, if the various agencies do not work together, the state may not have a functioning comprehensive program.

To qualify for funding under this option, the state shall have a demonstrably effective mechanism to assure that all the various agencies with wetland or wetland-related programs function together as a whole, comprehensive, coordinated program. In addition, if only one of the state agencies is designated as the entity to receive a PPG, that agency shall have the ability, and the willingness, to pass PPG funds on to the other state agencies that administer wetland programs.

[NOTE: If appropriate, this provision also applies to Tribal governments. We anticipate that most Tribal governments are not large enough for this issue to be as much concern as for state government.]

Watershed (Ecosystem) Protection, Management and Restoration Approach

The Watershed (Ecosystem) Protection Approach implements EPA, state, Tribal, and local programs in a holistic, integrated manner to address natural resource protection. The watershed approach is a coordinating framework for environmental management that focuses public and private sector efforts to address the highest priority problems within hydrologically defined geographic areas, taking into consideration both ground and surface water flow. This approach recognizes wetlands as components of larger hydrologic units that include surface and ground water resources. In addition, these hydrologic units are part of larger aquatic and terrestrial systems.

The Wetlands Program supports watershed approaches that work to integrate wetlands into a Watershed (Ecosystem) Approach to protect resources, prevent pollution, achieve sustainable environmental goals, and meet other objectives important to the community. Although watershed approaches may vary in terms of specific objectives, priorities, elements, timing, and resources, they should be based on the following guiding principles taking from EPA's *Watershed Approach Framework* (EPA 840-S-96-001, June 1996).

Partnerships. Those people most affected by management decisions are involved throughout and help shape key decisions. This ensures that environmental objectives are well integrated with those for economic stability and social/cultural goals. It also provides that people who depend upon the natural resources within watersheds are well informed of and participate in planning and implementation activities.

Geographic Focus. Activities are directed within specific, defined geographic areas, typically the areas that drain to surface water bodies or overlay ground waters or a combination of both.

Sound Management Techniques based on Strong Science and Data. Collectively, watershed stakeholders employ sound scientific data, tools, and techniques in an iterative decision making process which includes:

- Assessment and characterization of the natural resources and the communities that depend upon them
- Goal setting and identification of environmental objectives based on the condition of vulnerability of resources and the needs of the aquatic ecosystem and the people within the community

- Identification of priority problems
- Development of specific management options and action plans
- Implementation of such action plans
- Evaluation of effectiveness and revision of plans, as needed

Because stakeholders work together, actions are based upon shared information and a common understanding of the roles, priorities, and responsibilities of all involved parties. Concerns about environmental justice are addressed and, when possible, pollution prevention techniques are adopted. The iterative nature of the watershed approach encourages partners to set goals and targets and to make maximum progress based on available information while continuing analysis and verification in areas where information is incomplete.

States and Tribes shall consider and use, as appropriate, the following list of process actions for implementing a watershed (ecosystem) approach. These actions are from *Practical Steps to Implement an Ecosystem Approach in Great Lakes Management* (USEPA/Environment Canada/IJC/Wayne State University, 1995).

- Adopt the watershed/bioregion as the primary unit for management
- Develop a partnership agreement or other mechanism for cooperative multi-stakeholder management and ensure commitment of top leaders
- Identify and empower an "umbrella" watershed organization for coordination
- Develop a long-term vision, goals and quantitative indicators for the "desired future state" of the ecosystem that can be understood by all partners
- Reach agreement on a set of principles to guide multi-stakeholder, decision-making process
- Ensure all watershed planning processes acknowledge the vision, goals, indicators, and principles
- Establish a geographic information system (GIS) and decision support systems capability within watershed organizations
- Compile data and information for input into GIS and ensure a strong commitment to research and monitoring to understand the ecosystem and fill knowledge and data gaps
- Set priorities that target major causes of ecosystem health risks, evaluate remedial and preventive options, implement preferred actions, and monitor effectiveness in an iterative fashion
- Ensure full costs and benefits are assessed for each project in the watershed
- Consolidate capital budgets and pool resources to move high priority projects forward
- Create the framework and conditions for private sector involvement and capitalize on its enterprise, initiative, creativity, and capability for investment
- Use market forces and economic incentives to achieve ecosystem objectives
- Commit public, biennial, state-of-the-environment and economy reporting to measure and celebrate ecosystem progress, and to measure stakeholder satisfaction

- Ensure a strong commitment to broad-based, ecosystem education and human resource development throughout the process

To qualify under this special grant provision the state or Tribe shall participate in and encourage watershed projects that are comprehensive and that adequately address wetlands management issues within the watershed. Projects must have a substantial wetlands component; should address other water resource issues; should involve various levels of government and stakeholders (federal, state, Tribal and local government, interest groups, and landowners); and should consider a multitude of possible environmental protection techniques, programs or approaches to identify and address the problems. These projects should focus on comprehensive solutions that consider environmental protection and economic development needs. Public involvement is a key component in any watershed project.

Regulatory (Permit) Program

Geographic scope. The state or Tribe shall have a comprehensive wetland regulatory (permit) program that is similar to the Clean Water Action section 404 program. The program must be statewide (reservation-wide) and not just within a limited area within the total jurisdiction of the state or Tribe. For example, a regulatory program just within the coastal (tidal) zone or that exempts large areas from regulation would not qualify.

Delineation. The state or Tribe's program shall be consistent/equivalent with or more stringent than the federal program. The state/Tribe must use a delineation method that is equivalent to the federal methodology. The state or Tribal scope of geographic jurisdiction must be at least that of the federal program. Use of the state or Tribal delineation methodology should arrive at the same "line" as the federal delineation method.

Activities regulated. The state or Tribe's program shall regulate at least the same activities that the federal program regulates—discharges of dredged or fill material into waters of the United States, including wetlands. A number of activities may result in a discharge of dredged or fill material into waters of the U.S. These can include, but are not limited to, industrial, recreational and commercial construction; building of intake and outfall structures, utility lines, or impoundments; building of causeways or roads, dams, dikes, groins, sea walls, breakwaters, levees, or artificial islands; mining; disposal of dredged material; beach nourishment; and ditching or mechanized land clearing activities. In addition to the activities regulated under the federal program, the state or Tribe could choose to regulate wetland impacts caused by activities other than filling.

A state or Tribal program that regulates only a subset of the activities regulated by the federal program will not qualify for this funding option.

404(b)(1) Guidelines. The state or Tribe's program shall use environmental review criteria that are in compliance with the 404(b)(1) Guidelines. The premise of the Guidelines is that no discharge of dredged or fill material will be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Guidelines establish a sequential permit review process in which the applicant must first demonstrate that impacts to wetlands and other aquatic resources have been avoided to the maximum extent practicable. Next, the Guidelines require the applicant to minimize unavoidable impacts to wetlands and other aquatic resources. Finally, the applicant must provide compensation to the extent appropriate and practicable for any remaining unavoidable impacts. In addition to these sequential requirements, the Guidelines also prohibit projects which would violate other applicable laws such as

state or Tribal water quality standards, toxic effluent standards, or which would result in jeopardy to threatened or endangered species or adverse modification to critical habitat. Finally, no discharge can be permitted if it would cause or contribute to significant degradation of the waters of the United States.

While it is unlikely that any state or Tribe will adopt the Guidelines word-for-word, the state or Tribe shall have environmental review criteria that contain the basic principles included in the Guidelines.

Enforcement. The state or Tribe shall have a demonstrably effective enforcement program that serves to deter violations of the state or Tribal program while also having direct punitive value when there is a violation. The enforcement program must allow the state or Tribe to conduct compliance or oversight of activities that impact wetlands and pursue corrective actions through either administrative or penalty processes. The program shall have the authority to assess both civil and criminal penalties.

[NOTE: A state or Tribe does not have to have an assumed section 404 program to fulfill the components identified above.]

Monitoring and Assessment Approach

States and Tribes shall be working to develop comprehensive programs to monitor and assess the biological, physical, and chemical conditions of their wetlands or to integrate wetlands into existing surface water monitoring programs. While the states, Tribes, and EPA are working to achieve the short-term goal of "no net loss" of wetlands, wetland programs also need to focus on the longer-term goal of increasing the quantity and quality of the Nation's wetlands.

Inventory. States and Tribes shall develop and manage an inventory of wetland acreage within their boundaries. This inventory shall follow standards set by the Federal Geographic Data Committee to allow for comparison of data. This inventory shall be maintained and updated on a regular basis.

Classification system. States and Tribes shall adopt a wetland classification system that is based on landscape position, hydrology, and vegetation. States and Tribes can adopt existing classification system, such as the HGM (hydrogeomorphic) classification system or the Cowardin classification system, or can develop their own based on similar principles.

Permit and Restoration Tracking System. State and Tribal programs shall manage an up-to-date system to track wetlands information, including Clean Water Act section 401 water quality certifications, wetlands permits, and other relevant information. The purpose of this tracking system is to know the location of wetland losses. Such a georeferenced permit tracking system can be as simple as a map with numbered pins referenced to files in filing cabinets or as complex as a computer database tied to a geographic information system. At a minimum, the system shall include information on the location of the impacts to a wetland(s), the size of the impact, a map of the site, and a description of the impact. Summaries of permit activities shall be included in the 305(b) Reports. The tracking system shall be maintained and updated on a regular basis.

In addition to tracking permit actions, the state or Tribal programs shall manage an up-to-date system to track wetland restoration activities on state or Tribal and private lands within their boundaries. Summaries of restoration activities shall be included in the 305(b) Reports. Individual restoration projects should be reported into a national restoration database.

[Note: For projects funded by the federal government, information can be obtained by contacting relevant agencies such as county or state NRCS offices, regional FWS offices, BLM offices, and others.]

Biological Monitoring and Assessment Programs. While states and Tribes have not yet developed and implemented biological monitoring and assessment programs for wetlands, they should be working to develop these programs. States or Tribes do not need to have an effective monitoring program in place to initially qualify for operational support funding through a PPG. However, they must currently be developing a wetland bio-monitoring program and EPA must determine that they are making significant progress, each year following initial qualification, toward such a program. After five years, a state or Tribe shall at least monitor the majority of wetlands in targeted, priority wetlands and should be making progress towards monitoring wetlands throughout their jurisdiction. Also in five years, a state or Tribe shall have calibrated and tested bioassessment methods for at least one wetland type (e.g., depressional, riverine) and shall be making significant progress towards developing or calibrating existing methods for use in other types of wetlands in their jurisdiction. If after five years, states or Tribes no longer qualify for this funding option until EPA agrees that the monitoring program is "operational." Volunteer monitoring programs can supplement state bioassessment programs, but should never replace them. Volunteer monitoring programs are encouraged, but will not be considered for this requirement.

Recommended components of a comprehensive bioassessment program include:

- Identified study area(s) boundaries. The study areas could be either an entire state/reservation; a set of key watersheds, ecoregions, hydrogeomorphic classes; or other geographically targeted areas. Pilot studies in key watersheds would be good links to watershed protection projects.
- Classification of wetlands to account for the variability in biological communities in different wetland types. Remember that, in this case, the endpoint is not a classification method. The purpose of classifying wetlands is to better understand how biological communities are degraded by human activities. Traditional classification systems (e.g., HGM, Cowardin) may be good starting points, but the wetland types should ultimately be based on the biological communities. This is important for conducting bioassessments because we do not want to compare biological communities that are naturally different.
- Identification of a set of minimally impaired reference wetlands for the study area. Permanent sampling plots should be established in reference wetlands. In addition to minimally impaired sites, a set of degraded wetlands should be identified to determine the range of potential conditions. Reference wetlands should be sampled at least once a year.
- A random sample design or a targeted sample design based on the monitoring program's purpose. Targeted sampling is recommended while developing the assessment protocols because it is necessary to have sites across a gradient of conditions. When implementing a program to monitor biological conditions of wetlands, a random sampling design is recommended.
- The state or Tribe should identify at least two potential indicator assemblages, which could include assemblages such as vascular plants, algae, birds, amphibians, fish, or macroinvertebrates.
- The state or Tribe should develop and test biological monitoring and assessment protocols for at least two assemblages. The assessments should

be based on an index of biological integrity, multivariate statistics, or some combination. During the development phase, chemical and physical measurements of wetlands (e.g., hydrology, pH, water chemistry) help refine the classification scheme and identify types of stressors degrading biological communities. During the implementation phase, bioassessments provide a way to screen wetlands for signs of degradation. If a wetland shows signs of degradation, then wetland professionals can return and then conduct additional tests and measurements to determine the extent of the problem and how to fix it.

- Ultimately, the state or Tribe can conduct bioassessments and compile a database of results to test and refine the sampling protocols and biological indicators. This database can also provide information from which to prioritize restoration, evaluate the success of mitigation and restoration projects, protect high quality or outstanding waters, and derive narrative and numeric biological criteria for water quality standards. In addition, states and Tribes should then define and/or determine the attainment of designated uses in their wetlands for inclusion in the Clean Water Act section 305(b) reports.

Section 305(b) Reporting. Tribes are encouraged to submit comprehensive sections on wetlands in their Clean Water Act section 305(b) reports. The content of the wetland section of the report should respond to the content and format directions specified in *Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b)) Reports) and Electronic Updates: Report Contents* (EPA-841-B-97-002A) and *Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b)) Reports) and Electronic Updates: Supplement* (EPA-841-B-97-002B). In general, a state must assess the effectiveness of its wetland program(s) and must report on the current status (quality and quantity) of wetlands within the state.

Water Quality Standards

Inclusion of wetlands in water quality standards is necessary to ensure that, under provisions of the Clean Water Act, wetlands are afforded the same level of protection as other waters. Water quality standards provide a programmatic basis for a variety of water quality management activities including, but not limited to, monitoring and assessment under section 305(b), permitting under section 402 and section 404, water quality certification under section 401, and control of nonpoint source pollution under section 319. Wetlands should be incorporated into existing water quality standards and criteria should be refined, when appropriate (e.g., dissolved oxygen, pH, biological criteria), to reflect conditions found in wetlands. To qualify for funding, the state or Tribal wetland program shall contain the following essential elements for water quality standards programs:

Definition of state or Tribal waters. The state or Tribe shall explicitly incorporate the term “wetlands” into their definition of state or Tribal waters . This definition should be included in regulations for both water quality standards and the Clean Water Act section 401 water quality certification program.

Designated uses. The state or Tribe shall establish and assign designated uses to their wetlands (e.g., aquatic life use support).

Refined criteria. The state or Tribe shall refine criteria or water quality standards, where appropriate, to reflect conditions found in wetlands (e.g., pH, dissolved oxygen, biological criteria).

Biological criteria. The state or Tribe shall establish or be in the process of developing biological assessment methods and biological criteria (narrative and numeric) for wetlands.

Anti-degradation policy. The state or Tribe shall specifically incorporate wetlands into their anti-degradation policy.

Clean Water Act Section 401 Water Quality Certification Program

To qualify for funding, the state or Tribe's wetland program shall contain the following essential elements of a Clean Water Act section 401 water quality certification program:

- The state or Tribe shall actively implement a section 401 water quality certification program by actively reviewing federal section 404 and other appropriate federal permits.
- The state or Tribe shall develop or modify their regulations and guidelines for section 401 certification and water quality standards to clarify their programs, codify their decision process, and incorporate special wetlands considerations into the more traditional water quality approaches.
- The state or Tribe shall have a system to track their section 401 water quality certification actions. This system should be maintained and updated on a regular basis.

Wetlands Restoration Program

The state or Tribe shall have a program which encourages and supports wetland restoration and enhancement. Mitigation required under a regulatory program does not fulfill this requirement. A state or Tribal wetland restoration/enhancement program may include:

- Direct state or Tribal funding of wetland restoration projects
- An active program of wetland restoration on state or Tribal owned land
- Provisions for technical assistance to landowners or organizations carrying out wetland restoration projects
- Active research regarding effective wetland restoration projects and methods to measure the effectiveness of restoration activities

Partnerships

State and Tribal governments cannot comprehensively protect, manage, and restore their wetlands by themselves. To qualify for funding:

- States and Tribes shall demonstrate ongoing partnerships with federal, state, Tribal, local, and/or public/private organizations for the specific purpose of wetlands protection, management, and/or restoration.
- States and Tribes shall develop a partnership strategy to outline specific activities to be taken to increase the state or Tribe's involvement in working with all levels of government as well as other public/private sector entities.

Outreach Program

A public that understands the reasons for wetland protection can make the job of wetlands regulation and management easier. The state or Tribe shall maintain an outreach/public education program to provide information about the importance of wetlands, such as their function and values, as well as information about the state or Tribe's wetland protection (regulatory) and other wetland-related programs.

Other Non-Regulatory Programs

- The state or Tribe shall have an active, funded wetland acquisition program.
- The state or Tribe shall have a program which actively encourages protection of private wetlands through a conservation easement program, the purchase of development rights, or similar programs.
- The state or Tribe shall administer a tax incentive program designed to encourage protection of privately owned wetlands.

Possible Alternative Approach

If a state or Tribe can provide documentation that they measure wetland gain and loss on a watershed-by-watershed basis, and can document a significant increase of wetland acreage each year, EPA's Wetlands Division will consider that the state or Tribe has met the core essential elements.